WORKING PAPER

Working Paper No. 20

RURAL ARTISANS IN TAMIL NADU

E.S. Srinivasan

assisted by

G.N. Deenadayalan

MADRAS INSTITUTE OF DEVELOPMENT STUDIES

79, SECOND MAIN ROAD, GANDHINAGAR, ADYAR

MADRAS 600 020

Working Paper No. 20

RURAL ARTISANS IN TAMIL NADU

E.S. Srinivasan

assisted by

G.N. Deenadayalan

MADRAS INSTITUTE OF DEVELOPMENT STUDIES
79, Second Main Road, Gandhinagar
Adyar, Madras : 600 020

September 1981

RURAL ARTISANS IN TAMIL NADU

E.S. Srinivasan
assisted by
G.N. Deenadayalan

This study on the "Rural Artisans of of Tamil Nadu" has been prepared at the instance of the Madras Institute of Development Studies.

Although much research has gone into the several aspects of development in Tamil Nadu in the more recent years, the rural artisan sector has been one of the neglected areas of research. This, despite the official support for the rural artisan trades in the context of providing employment opportunities for the rural poor and unemployed. There are well established organisations, both voluntary and official, to sponsor and foster the activities of the rural artisan sector. There have been reports, both official and academic, on certain specific areas of rural industrialisation. A state level study of the rural artisan trades in Tamil Nadu, however, has not been made so far.

The present study makes a modest attempt to study the nature of these trades in Tamil Nadu based on the reports and studies that have been already undertaken individually by the various organisations involved in rural artisan development in the state. In addition, the more recent available data have also been collected from the sponsors of rural artisan development such as KVI Commission and Board. Where all possible, suggestions have been made for the improvement of these trades.

I. The identification of the rural artisans in Tamil Nadu

The term "Rural Artisans" requires an explanation because of the various definitions and coverages offered by the different sources. The State level information about rural artisans in Tamil Nadu is available from four sources. They are: (1) Khadi Commission/Board (2) Handicrafts Board/Development (3) Census Directorate and (4) Reserve Bank of India. Since the definitions and coverages offered by each of these

institutions are different from the rest, it is rather difficult to offer a list of rural artisan activities in Tamil Nadu which is acceptable to all the institutions concerned. The rural artisan categories covered by each of the four institutions are given in Table 1.

It may be seen from this table that the number of rural artisan categories covered by the various institutions varies from 20 in the case of Handicrafts Board to 29 in the case of the census (1971). It is interesting to note here that, while providing refinance facilities towards the working capital requirements for the 22 approved groups of Cottage and Small Scale Industries, the Reserve Bank of India has actually taken into consideration only 10 categories of rural artisan trades for its All India Debt and Investment Survey Report. Another interesting point that emerges from the above Table is that the census categories range from the unidentified (miscellaneous) category of "labourers" to the sophisticated - by the rural standards - "electronic workers". The categories are also seen overlapping in cases such as palm based activities.

Owing to such conceptual and coverage differences it is highly difficult to make any direct comparison of the data. However, these data have been used in the present study to supplement each other, especially where data gaps are noticed.

Objectives:

The main objectives of this study are:

(1) To identify the various types of rural artisan trades in Tamil Nadu.

(2) To analyse the income, employment and technology characteristics of the rural artisan trades in Tamil Nadu.

(3) To bring out the manner in which the artisans and the trades are related to the rest of the economic process in the state and to examine the role of various institutional agencies involved in the development of rural artisan trades in the state.

Scope

In this study only fifteen major rural artisan trades most of which are covered by the Khadi and Village Industries Commission/ Board are considered for detailed analysis. The notable exclusions among

Table 1

Rural Artisan Categories in Tamil Nadu

S.No.	Khadi Commission	S. No.	Handicrafts Board
1.	Bee Keeping	1.	Art Plate
2.	Cottage Match, manufacture of fire works and Agarbatties.	2.	Ornamental handles
3.	Cottage pottery industry	3.	Metal works
4.	Cottage Soap Industry	4.	Toys and Doll making
5.	Flaying, curing and tanning of hides and skins and ancillary industries connected with the same cottage leather industry	5.	Village pottery
		6.	Druggets and carpets
		7.	Cane Basket and Furniture
		8.	Cumbly weaving
6.	Ghani Oil Industry	9.	Dyeing of sarees
7.	Hand made paper	10.	Toda embroidery
8.	Manufacture of cane, gur & Khanda-sari	11.	Decorated garlands, pith models and flowers and agarbatti
9.	Palmgur making and other palm products industry	12.	Gold leaf and cut minor work
10.	Processing of cereals and pulses	13.	Painting
11.	Manufacturing and use of manure and methane gas from cowdung and other waste products (such as flesh of dead animals etc.)		

Contd.....

Table 1 Contd.

Rural Artisan Categories in Tamil Nadu

S.No.	Khadi Commission	S.No.	Handicrafts Board
12.	Lime stone, lime shell and other lime products.	14.	Manufacture of musical instruments
13.	Manufacture of shellac	15.	Manufacture of temple vahanams, car making, out fittings and umbrella making.
14.	Collection of forest plants and fruits for medical purposes.	16.	Wood carving & wood toys
15.	Fruit processing & fruit preservation	17.	Soap stone carving
16.	Bamboo and cane work	18.	Sea shell & tortoise shell work
17.	Blacksmithy	19.	Palm leaf work
18.	Carpentry	20.	Koraimats
19.	Fibre other than coir		
20.	Manufacture of household utensils in aluminium		
21.	Manufacture of Katha		
22.	Manufacture of gum resins		
23.	Manufacture of lokvastra		
24.	Manufacture of polyvastra		

Source: 1. Khadi and Village Industries Commission - Madras-86.
2. All India Handicrafts Board, New Delhi 1977.
3. Directorate of Census Operations, Madras-86.
4. RBI News letter March 15, 1980
5. RBI: All India Rural Debt and Investment Survey.

Contd......

Table 1 Contd.

Rural Artisan Categories in Tamil Nadu

Code No. Census	RBI 'A'	Artisans RBI 'B'
71. Miners, Quarry men, well drillers and related workers	1. Flaying and tanning	1. Weavers, knitters, carpet makers etc.
72. Metal processors	2. Leather goods	2. Dress makers etc.
73. Wood preparation workers	3. Pottery	3. Shoe-makers and other leather workers
74. Chemical processors & related workers	4. Hand pounding of paddy and cereals	4. Blacksmiths, goldsmiths, copper smiths and other metal workers
75. Spinners, weavers, knitters, dyers and related workers	5. Rice Mills including flour mills and bakeries	5. Carpenters, painters, etc.,
76. Tanners, fell mongers and pelt dressers	6. Oil crushing	6. Stone carvers, brick layers, plasterers, glazers, cement finishers etc.
77. Food and Beverage processors	7. Palm gur	7. Printers(paper & textiles) engravers, blockmakers etc.,
78. Tobacco preparers & Tobacco product makers	8. Cane gur and Khandsari	8. Potters, glass & ceramic workers etc.
79. Tailors, dress makers, sewers & related workers	9. Canning of fruits and vegetables	9. Basket makers, mat weavers & related workers
80. Shoe makers and leather good makers	10. Manufacturing and processing of agricultural and marine products and forest produce including beverage industries.	10. Makers of musical instruments, toys, sport goods, etc.
81. Carpenters, Cabinet and related wood workers		
82. Stone cutters and carvers		
83. Blacksmiths, tool makers and machine tool operators.		

Source: 1. Khadi and Village Industries Commission-Madras-86. (2) All India Handicrafts Board New Delhi 1977 (3) Directorate of Census Operations, Madras-86. (4) RBI News letters, March 15, 1980. (5) RBI, All India Rural Debt and Investment Survey.

Contd....

Table 1 Contd.

Rural Artisan Categories in Tamil Nadu

Code No. Census	RBI 'A'
84. Machinery fitters, machine assemblers and precision instrument makers (except electrical)	11. Other village industries such as carpentry, blacksmithy, bee keeping honey and honey products.
85. Electrical fitters and related electronic workers	
86. Broadcasting station & sound equipment operators and cinema projectionists	12. Handicraft industries
87. Plumbers, welders, sheet metal and structural metal preparers and erectors.	13. General engineering
88. Jewellery & precious metal workers and metal engravers (except printing)	14. Chemical engineering and chemical industries
89. Glassformers, potters and related makers	15. Construction materials
90. Rubber and plastic product makers	16. Sericulture
91. Paper and paper Board product makers	
92. Printing and related workers	17. Coir
93. Painters	
94. Production and related workers	18. Spinners societies
95. Brick layers and other construction workers	19. Cotton textiles and other textiles
96. Stationary engines and other related equipment operators, oilers, and greasers.	20. Printing, book binding and lithography
97. Material handling and related equipment operators, loaders and unloaders.	21. Saw mills wood work and furniture and fixtures
98. Transport equipment operators	22. Miscellaneous industries such as manufacture of sports goods, buttons, card boards and other paper products, cutting and polishing of real and artificial gems and stones
99. Labourers	

the Khadi Commission Categories are Khadi (since their problems are similar to those of Handloom Weavers) and relatively insignificant trades such as manufacture of shellac, collection of forest plants etc., manufacture and use of bio-gas and manufacture of utensils in aluminium whose contribution to income or employment is relatively negligible. Thus, in the present study only the remaining fifteen artisan activities among the Khadi Commission categories (shown in Table 1) are used for analysis.

Findings:

Tamil Nadu occupies an important place among the states of India in rural artisan trades. The share of Tamil Nadu Village industries in All-India production of khadi and village industries during 1977-78 is significant. Tamil Nadu holds the first All-India rank in Khadi, Cottage Match, Plam based activities, non edible oils & soap and bee keeping. The details are given in Table 2.

The rural artisan trades assume importance in Tamil Nadu also in view of the large number of artisans engaged in these trades. Although different figures are suggested by the four different sources of data used for the present study, it may be seen from Table 3 that a significant proportion of Tamil Nadu population is engaged in rural artisan trades.

According to the 1971 census there were about eleven lakhs of (10,95,319) rural artisans in Tamil Nadu of whom about 2 lakhs (8,97,298) were males and only the rest (1,98,021) were females. Among them, weavers alone accounted for more than 2 lakhs (2,69,281), claiming the largest number. The other prominent groups were brick-layers and other construction workers (94,995), labourers (85,473), carpenters and wood workers (84,219) and potters and related workers (50,583). According to this classification tanners and shoe makers put together accounted for only around 24,963 of the artisans and blacksmiths, 35,695. The participation of women total number of/artisans was prominent in weaving, bricklaying and pottery and only negligible participation by the women artisans was noticed in shoe making, carpentry and blacksmithy.

Table 2

Share Of Tamil Nadu In All India Production of Khadi and Village Industries 1977-78

	Percent share of T.N. in All India production	All India Rank
Khadi and Village industries	16.95	
Khadi	20.73	I
Village industries	15.67	
PCPI	5.19	VIII
Ghani oil	9.44	V
Village leather	6.69	IV
Cottage Match	87.87	I
Palmbased	73.96	I
NEO & SOAP	35.02	I
Handmade paper	13.63	III
Beekeeping	31.28	I
Village pottery, fibre	Less than 5%	-
Carpentry & Blacksmithy	6.98	V
Lime	8.54	V
Gobargas	5.90	VIII
Bamboo cane	7.09	IV

Spurce: KVIC At a Glance, Khadi Commission, (Bombay).

Table - 3

Rural Artisans in Tamil Nadu

Source of data	Reference Year	Population (crores)	Labour force (crores)	Number of Rural artisans (lakhs)	Rural Artisans as a year of total	
					Population	Labour force
Census	1971	4.12	1.63	11.0C	3.5	6.9
Khadi Commissions	1977-78			3.03	0.63	1.5
Khadi Board	1978-79	4.79	1.92*	3.17	0.65	1.6
Handicrafts Board	1977			0.95	0.2	0.5

*based on quick estimates - cited in Nayudamma Committee Report.

The 1971 census on rural artisans in Tamil Nadu alone gives out the literacy and age particulars. Of the total number of rural artisans (10,95,319), 63,689 belonged to the age group 0-14 and 53,489 belonged to the age group 60+. Thus those in the working age group 15-59 (8,88,141) formed a significant proportion of the total. Among the total number of artisans around 50 per cent (5,82,304) were literate and literacy was low in the case of female artisans as only 13,000 female artisans were literate.

Districtwise census data are given in Table 4. According to this, more than 55 per cent of the rural artisan population of Tamil Nadu are concentrated in five districts, namely Coimbatore, Salem, Tirunelveli, Tiruchirappalli and North Arcot, in that order. Although in all the districts the sex ratio is very much in favour of the males, it is interesting to note that in Tirunelveli District along the male-female ratio is 7:5 and the number of female rural artisans is the highest (50,842) accounting for more than 25 per cent of the total female rural artisan population. The number of male rural artisan is the highest in Coimbatore (at 1,49,351).

However, the census data have certain limitations. What the Nayudamma Committee has said about the nature of census data relevant for leather workers, in fact, holds good for all the rural artisans. The Committee said: "Census data of 1971 on the status of rural leather workers is inadequate because it accounts only for those workers whose main occupation is work in leather industry. It thereby leaves out possibly several thousand workers and their dependents whose secondary occupation might be leather and allied industries who might have been classified under other professions because their primary occupation was in some other industry. Thus reliable and comprehensive data is missing on the number of leather units, total economic and socio-economic status of workers in leather industry in Tamil Nadu."

The Khadi Commission data, however, indicate that Chengalpattu and Ramanathapuram districts too have rural artisan concentration, although

Table - 4

District-Wise Census Data - Prominent Rural Artisans - Total Workers - Age Groups And Kiterates

Leather workers (76-80)

Sl.No.	Districts	Total workers			Age-groups			Total literates		
		Male	Female	Total	0-14	15-59	60+	Male	Female	Total
1	Chingleput	890	-	890	10	750	130	250	-	250
2	South Arcot	1250	-	1250	10	1100	140	337	-	337
3	North Arcot	5043	300	5343	60	5013	270	1872	28	1900
4	Coimbatore	2360	10	2370	40	1900	430	447	-	447
5	Nilgiris	20	-	20	-	10	10	10	-	10
6	Thanjavur	330	10	840	20	270	50	199	-	199
7	Tiruchirapalli	3700	30	3730	30	3490	260	823	-	823
8	Madurai	2640	10	2650	40	2350	260	760	-	760
9	Ramanathapuram	1260	10	1270	10	1120	140	279	-	279
10	Salem	2101	100	2201	30	1931	240	500	-	500
11	Dharmapuri	2000	30	2030	60	1820	150	467	-	467
12	Tirunelveli	2639	140	2779	40	2349	390	677	-	677
13	Kanyakumari	40	-	40	-	30	10	40	-	40
	Tamil Nadu	24323	640	24963	350	22143	2470	6651	28	6679

Source: Directorate of Census operations Madras -86.

Contd;.

Table 4 Contd.

District wise Census Data - Prominent Rural Artisans - Total Workers - Age Groups and Literates

Potters & related workers (89+95)

	District	Total workers			Age-groups			Total literate		
		Male	Female	Total	Male	Female	Total	Male	Female	Total
1	Chingleput	11278	3023	14301	913	13108	280	5109	60	5169
2	South Arcot	6351	328	6679	150	6028	501	3818	-	3818
3	North Arcot	10895	1509	12404	400	11125	879	5424	49	5473
4	Coimbatore	20180	4115	24295	930	21254	2111	7009	179	7188
5	Nilgiris	1122	387	1509	70	1399	40	577	20	547
6	Thanjavur	9245	1087	10332	340	9352	640	5607	128	5735
7	Tiruchirapalli	12992	2969	15961	580	14371	1010	5910	39	5949
8	Madurai	9340	1173	10513	320	9551	732	4699	126	4825
9	Ramanathapuram	7590	1297	8887	290	8077	520	4188	106	4294
10	Salem	10271	181	1608	70	1398	140	724	10	734
11	Tirunelveli	10030	1135	11165	7968	2387	810	5801	279	6080
12	Kanyakumari	8223	615	8838	335	8143	360	5565	128	5693
	Tamil Nadu	123725	21853	145578	12716	123451	9411	58347	1188	59535

Source: Directorate of Census Operations Madras-86

Table 4 Contd.

District Wise Census Data - Prominent Rural Artisans - Total Workers - Age Groups And Literates

Carpentry and blacksmithy (73+81+83)

		Total workers			Age groups			Total literates		
		Male	Female	Total	Male	Female	Total	Male	Female	Total
1	Chingelput	6900	404	7304	1323	5851	130	4841	20	4861
2	South Arcot	3190	140	3330	70	3010	250	792	0	792
3	North Arcot	8602	60	8662	250	7752	660	6276	10	6286
4	Coimbatore	13906	286	14192	370	12821	1001	8683	40	8723
5	Nilgiris	573	20	593	20	563	10	121	9	130
6	Thanjavur	11340	-	11340	340	10220	780	8071	-	8071
7	Tiruchirapalli	17929	260	18189	360	17249	580	3591	17	3608
8	Madurai	11713	120	11833	360	10755	918	7137	9	7146
9	Ramanathapuram	10572	6202	16774	3896	12168	710	7108	1764	8872
10	Salem	7311	130	7441	220	6691	530	4428	-	4428
11	Dharmapuri	1990	30	2020	60	1800	160	1501	10	1511
12	Tirunelveli	11279	10	11289	280	9829	1180	7440	10	7450
13	Kanyakumari	4553	20	4573	70	4123	380	3797	20	3817
	Tamil Nadu	112737	7177	119914	6486	104860	8568	73745	1910	75655

Source: Directorate of Census Operations Madras-86.

they stand next only to Coimbatore district. Thus, among the districts of Tamil Nadu, Coimbatore claims the largest number of rural artisans as well as (Khadi Commission) organised rural artisan units. These data also broadly suggest that the sponsoring institutions like Khadi Commission cover only an insignificant proportion (around 20 per cent) of the total rural artisan population in Tamil Nadu.

The details regarding the handicrafts in Tamil Nadu suggest that certain districts such as Thanjavur, Tirunelveli and Kanyakumari dominate in respect of variety of artisan trades and annual average production. Among the crafts, artisan concentration is noticed in palmbased activities (almost 70 per cent) and fibre mats. About 86 per cent of the total production capacity has been utilised already in Tamil Nadu, although exceptional cases (e.g. metal ware) are also seen where the unutilised capacity has been as low as 17 to 20 per cent. If all the rural crafts are taken into consideration the production value per artisan, according to this data source, works out to around Rs.540 annually.

II. Economic characteristics of rural artisans trades in Tamil Nadu

A. Population characteristics

The population characteristics such as age, sex, education of the rural artisan in Tamil Nadu are indicated by the 1971 census data. The details are given in Table 4 for selected industries.

Sex Ratio : The census shows that there were about 11 lakhs of rural artisans in Tamil Nadu of whom about 9 lakhs were males and about 2 lakhs were females. Thus according to this source the male-female ratio relevant for the rural artisan groups, works out to 9:2.

The rural artisan categories which claim large size of population are weavers (269,281) brick layers and construction workers (about one lakh), carpenters and wood workers (84219) and potters and related workers (50583). According to this classification tanners and shoe makers put together accounted for only 25,000 and blacksmiths 35695. The participation of women artisans is prominent in weaving, brick laying and pottery, and only negligible women

participation is noticed in shoe-making, blacksmithy and carpentry. For the male artisans apart from weaving construction work and carpentry seem to be important.

Age

According to the 1971 census, of the 11 lakhs rural artisans about 64,000 belonged to the age-group below 14 and 53,000 belonged to the age group above 60. Thus artisans in the working age-group 15-59 numbering about 9 lakhs formed a significant proportion. Among the census categories weaving claims the largest number of below 14 and above 60 artisans. In the effective working age groups also weaving claimed the largest number of rural artisans (2,39,497). The other prominent artisan categories excluding "labourers"were carpenters, potters and construction workers.

Literacy

Among the 11 lakhs of artisans just 50:3/(582304) were literate and literacy was low in the case of female artisans as only 13069 female artisans were literate. Here again weaving claimed the largest number of male and female literate artisans with carpentry as a close second for the male artisans.

B. Employment spects

For estimating the employment aspects of rural artisan activities during the period 1961-62 to 1976-77 the number of persons employed in each activitiy and the number of institutions (comprising registered and working units) have been used.

It may be seen from the Table 5 that in Palmbased activities, bee keeping, NEO & Soap and fibre the employment generation per unit, during the period concerned is on the increasing trend, despite some freak cases. Among these, palmbased and bee keeping have been prominent throughout the state i.e. in all districts. The opposite trend can be noticed in case of PCP and hand made paper artisan activities. All the other artisan activities reveal a fluctuating trend in this aspect.

Table 5

Employment Per Unit* In Rural Artisan Trades In Tamil Nadu (1961-62 to 1978-79)

S.No.	Rural Artisan Trade	1961-62	62-63	63-64	64-65	65-66	66-67	67-68	68-69
1	PCP	44	10	29	9	4	38	55	15
2	Oilghani	26	25	14	19	17	9	12	21
3	Village leather	13	11	11	7	-	-	-	-
4	Gur & Khandasari	-	173	-	-	171	119	189	280
5	Palmbased	119	139	152	133	146	42	153	154
6	Non edible oils & soap	-	-	-	-	-	-	-	-
7	Handmade paper	81	62	66	59	66	76	17	22
8	Bee keeping	1219	2999	2988	3483	3771	1037	1155	916
9	Village pottery	25	9	11	7	11	13	9	9
10	Fibre	8	35	8	28	115	75	20	48
11	Carpentry & Blacksmithy	-	-	-	-	208	514	421	22
12	Lime	-	-	12	7	15	12	17	10
13	Cane & bamboo	-	-	-	-	-	-	-	-
14	Cottage match	-	-	-	-	-	-	117	-

Source: KVIC, T.N.

*Based on the data pertaining to "Employment" and "Institutional Progress".

contd.....

Table - 5 Contd.

Employment Per Unit* In Rural Artisan Trades In Tamil Nadu (1961-62 to 1978-79)

S.No.	Rural Artisan trade	1969-70	70-71	71-72	72-73	73-74	74-75	75-76	76-77
1	PCP	11	17	8	5	7	9	5	4
2	Oilghani	9	9	9	5	4	5	3	5
3	Village leather	51	22	11	6	-	8	9	9
4	Gur & Khandasari	183	64	299	100	-	-	-	-
5	Palmbased	148	146	97	130	136	135	137	142
6	Non edible oils & soap	-	-	-	12	464	466	537	556
7	Handmade paper	23	17	17	16	16	17	20	17
8	Bee keeping	1092	1310	1333	1746	1217	-	-	-
9	Village pottery	10	13	39	32	9	12	17	26
10	Fibre	18	33	34	56	36	67	39	83
11	Carpentry & blacksmithy	17	27	38	16	8	9	25	21
12	Lime	4	5	4	23	42	4	3	2
13	Cane & Bamboo	-	5	-	60	101	119	52	71
14	Cotton match	-	-	-	86	73	71	57	63

Source:(KVIC, T.N.)

*Based on the data pertaining to "Employment" and "Institutional Progress"

The village industries covered seem to fall under three categories in terms of employment per working unit as shown below:

Table 6

Average Employment Per Unit In Rural Artisan Trades

Average employment per unit		
Up to one	1-10	above 10
PCP	Palmbased	NEO & Soap
Oilghani	Handmade paper	Bee keeping
Leather		
Gur & Khandasari		
Pottery		
Cane & Bamboo		
Fibre		
Carpentry & Blacksmithy		

The above information, taken along with the information on Production/Sales Values suggests that it is not easy to establish any relationship between average size of production/sales and the size of employment. The per unit employment of relatively large sized activities such as Palmbased industrial activities seems to be low. Only the well organised cottage industrial activities with specialised institutional support such as NEO & Soap and Bee keeping seem to offer significant employment opportunities per unit.

C. Indicators of efficiency

Seven economic indicators have been used in the present study. They are discussed one by one below.

Income: Low income has been one of the more serious problems experienced by the rural artisans in Tamil Nadu. In the absence of complete information

about the wage structure among the various rural artisan trades, the per capita production values may be used as an indicator of income levels. The available data for the period 1961-62 to 1977-78, provided by the Khadi Commission, Tamil Nadu, show clearly that except in case of Oilghani, NEO & soap all the artisan trades experienced a very low annual production (values) per artisan. For instance, in the case of bee keeping which is a prominent rural artisan trade in Tamil Nadu the annual production values per artisan were fluctuating between Rs.53 in 1966-67 and Rs.313 in 1977-78. The other prominent rural artisan trades such as palmbased and pottery also recorded low annual production values per artisan during the same period. It is interesting to note that the same artisan trades which contribute significantly towards production (values) account for the low per capita production values suggesting thereby either low production capacity per artisan or over-full employment conditions. The latter cannot easily be justified in the context of only part-time work being offered by these very same artisan trades. On the other hand, although it is easy to justify low artisan productivity in the context of low and traditional technology it is not possible at this stage to bring in the vicious circle hypothesis for explanation. The available wages data for both full time and part-time workers in the various rural artisan trades also support the view that in general the prevailing wages are low in Tamil Nadu. The above facts lead us to the inevitable conclusion that, although there are stray exceptions among the regions in Tamil Nadu and among different rural artisan trades the percapita income of the rural artisans in general is lower than the state income per capita. Generalisations however are not possible at this stage since data used are incomplete in many cases and cover only the Khadi Commission assisted units in Tamil Nadu.

According to the Reserve Bank data on rural indebtedness the total cash borrowing of the artisans in 1972, amounted to Rs.26,180. Of the estimated number of indebted rural artisan households in India, Tamil Nadu constituted 14 per cent. It may be noted that the asset groups Rs.0-500 and Rs.500-1000 accounted for a major proportion of the indebted rural

households followed by the asset groups Rs.1000-5000 in the case of Tamil Nadu. It may also be seen that in both Tamil Nadu and All-India the asset group Rs.1000-5000 stood first followed by the asset groups Rs.0-500 and 500-1000 among those indebted. It is clear from the above that the asset groups Rs.1000-5000, Rs.500-1000 and Rs.0-500 constituted major proportion of the indebted rural households in Tamil Nadu.

Similarly, of the aggregate debt relevant for All-India, Tamil Nadu constituted 10.2 per cent. The asset group Rs.1000-5000 for Tamil Nadu constituted only 6 per cent of the All India figure. But viewed from the point of aggregate debt the Rs.1000-5000 group accounted for the major proportion of debt followed by the Rs.5000-10000 asset group for Tamil Nadu as well as for All-India. The proportion of households reporting debt in Tamil Nadu was relatively higher in asset groups Rs.0-500, to Rs.5,000-10,000 and Rs,10,000 and above compared to the corresponding All India proportions. It is also seen that the total cash borrowings of the rural artisans formed about 2.1 per cent of the total borrowing of all the rural households in Tamil Nadu.

Among the sources of cash debt the 'Non-institutional Agencies' stood first followed by 'Friends & Relatives' and 'Institutional Agencies' in all the asset groups. The average cash borrowings of the rural artisans of Tamil Nadu from the 'Landlords' and 'Agricultural Money-lenders' were greater than its All-India counterpart. This clearly indicates the dominance of 'Landlords' and 'Agricultural Money-lenders' in satisfying the credit needs of rural artisans. The contributions of the 'Agricultural Money Lenders', 'Professional Money Lenders' and 'Landlords' were 30 per cent, 15 per cent and 11 per cent, respectively., of the total borrowings of the artisans whereas the role of the Government and Commercial Banks was negligible. 'Friends & Relatives also satisifed the cash needs of the rural artisans to a fairly significant extent.

Household expenditure accounts for a major share of cash debt outstanding followed by production expenditure and non-farm expenditure. Most of the cash debt of the rural artisans in Tamil Nadu occur at less than 12½ per cent rate of interest and for a period up to 3 years.

The above findings cannot be compared with the findings based on Khadi Commission data on production per artisan and on wages. However, put together, they do suggest that the rural artisans in Tamil Nadu are forced to depend on outside sources of funds which force the rural artisans to sell their output in settlement of these loans. This perhaps can adequately explain the fact that the rural artisans experience marketing and finance as two aspects of the same problem. This is not to say that the rural artisans of Tamil Nadu do not have specific marketing and finance problems. As the Nayudamma Committee has pointed out there exists stiff and unfair competition from large scale organised units especially in the case of mass production activities, and even in the case of Khadi Board marketing units, product specialists are absent. The Committee therefore pleaded for the establishment of a marketing corporation to look into such specific marketing problems. Turning to the specific financial issues which the rural artisans in Tamil Nadu suffer from it may be pointed out that the DRI scheme has not been effectively implemented on a large scale and the main task of identifying the eligible loanees is yet to be done methodically. Also the financial institutions are reported to be reluctant to lend working capital to the rural artisans. The suggestion made by the Nayudamma Committee is worth mentioning here. "A common list of rural artisans, farmers, landless labourers and women who are eligible for credit may be maintained. Suitable schemes must be drafted for organising these eligible people to pursue productive and profitable economic activities". Now that the DICs have been established in all the districts in the state, it should be possible to collect the essential data for reorganising the marketing and financial activities of the rural artisans and to draw up productive and profitable schemes for the rural artisans.

Employment

Most of the rural artisan trades are seasonal in character in the sense that much of their employment is only part-time. Full employment in all the 15 rural artisan trades accounts for only 2 per cent of total

employment. Noteworthy full time rural artisan trades are fibre rope making and carpentry and blacksmithy. Pottery offers full-time and part time employment almost on a 50-50 basis. The Khadi and Village Industries Board data relevant for 1978-79 also seem to corroborate the above findings.

Performance in backward areas

More recently much importance has been given to rural artisan trades in backward areas. From the Khadi and Villa.e Industries Board data it may be inferred that the resource-based activities are popular in the backward areas and among these trades palmbased activities stand out on considerations of production, sales, employment and wages.

Number of Units

In Tamil Nadu, during the year 1978-79 there were 11282 artisan units functioning under the Khadi Board. Of these carpentry and blacksmithy alone claimed nearly 3000 units. Palmbased, oilghani, pottery, fibre and leather units, taken along with carpentry and blacksmithy units covered as much as 84 per cent of the total number of units. The available data from Khadi Commission seems to suggest that the palmbased activities and PCP are almost entirely assisted by the Khadi Commission. In the case of NEO & Soap and handmade paper the Khadi Commission seems to support even units outside the control of Khadi Board. This implies the possibility of Khadi Commission helping such units as sponsored by the voluntary agencies. It must be noted that the total number of units suggested by the Khadi Board data does not cover the handicrafts units coming under the purview of All-India Handicrafts Board, Tamil Nadu. The All-India Handicrafts Board data (1977) suggest that there were around 16,000 artisan units under the Board's control of which around 9000 (above 55 per cent) belong to palmleaf work. Although these different figures are not directly comparable, they can definitely indicate the magnitude of the rural artisan activities in Tamil Nadu.

Production and Sales

The production and sales values of the rural artisan trades under Khadi Board during 1978-79 show that in terms of production and sales

values also palmbased activities top list with above Rs.12 crores and 5 crores respectively while total values of production and sales of all the 15 rural artisan trades covered in this analysis stand at around Rs. 24 crores and 18 crores respectively. In terms of production and sales values artisan trades such as oilghani, village leather and bee keeping stand next to palmbased activities.

Disbursement

Palmbased activities, again stand out in terms of disbursement by the Khadi Board. For instance during the year 1978-79 about 1575 units were financed with a paid up share capital of Rs. 51 lakhs. In the case of carpentry and blacksmithy units the Khadi Board provided towards capital expenditures to the tune of Rs.15 lakhs. Apart from these kinds of financial assistance Khadi Board also provided grants and loans especially to fibre, cane and bamoo and lime manufacturing units.

Number of Cooperative Societies

The latest available particulars regarding registered cooperative societies under the purview of Khadi and Village Industries Board reveal that there were 2915 cooperative societies in Tamil Nadu of whom only 1272 societies were actually working on 1.4.1979. The rest were either lying dormant or were already liquidated. Among the 1273 working cooperative societies palmbased societies claimed the largest number (1026) and thus accounted for more than 71 per cent of the working cooperative societies. Also it should be noted that of the 1598 cooperative societies in palmbased activities about 65 to 70 per cent were working in the year 1979, thus suggesting a relatively low sickness/mortality ra--- in palmbased activities among the rural artisan trades.

D. Technology

The recent schemes to tackle the problem of poverty and unemployment suggest the concern of the authorities in the promotion of

employment in rural areas. The available data on industry wise employment per unit in Tamil Nadu show that the palmbased and bee keeping activities have been generating increasing number of employment opportunities over the period 1961-62 to 1976-77. In PCP and handmade paper activities, however, the employment opportunities have been on the decrease. Most other activities do not suggest any definite trend. In the case of cottage match industry the authorities have already taken official measures to see that the industry absorbs many women and unemployed artisans in certain selected districts of Tamil Nadu. Appropriate technology studies have also been commissioned in order to provide more employment opportunities through modernisation of rural artisan trades. The Khadi Commission/Board of Tamil Nadu have already provided the necessary base for this kind of technological take-off especially in the case of pottery (with the cooperation of TACEL), oilghani and village leather. From the problems already faced by the rural artisans in these industrial activities it may be said that their capacity to absorb and make profitable use of the power-driven tools is low at present especially in those industries which depend exclusively on local demand.

The sample studies conducted in certain selected districts in Tamil Nadu reveal that even 40 to 50 per cent of the rural artisans, though willing to adopt improved methods, are not aware of any of the innovations in technology. It is therefore necessary that prior to the introduction of new and modernised units in the rural artisan trades rural extension work on the one hand and Research and Development activities on the other will have to be seriously considered. At present there are many voluntary and sponsoring agencies like Gandhigram Rural Institute, Khadi Commission/Board and Poompuhar, engaged in R & D and extension work. However due to incomplete information and lack of institutional coordination progress on this front has not been satisfactory.

E. The Model and actual schemes of rural artisans

The Khadi and Village Industries Commission (Bombay) has worked out the model schemes for the various rural artisan trades. The

industry-wise details of these schemes along with their corresponding values obtained from the rural artisan trades functioning in Tamil Nadu during the year 1978-79 are given in Table 7. While comparing these figures, however, it must be borne in mind that the model scheme figures and the actual figures are not directly comparable due to differences in definitions and other data source differences. They are put in one table only to indicate the areas where the deviations are glaring. Using the net (sales) earnings per artisan per year as the comparable indicator it may be seen from the table that among the rural artisan trades covered, only in PCP, Oilghani, Khandasari sugar, Fibre, Bamboo & Cane and Lime manufacturing the actual earnings are found to be greater than those suggested in the model scheme. This indicates the dependence of a large number of artisans, especially on trades where the actual net earnings per artisan are below the one suggested by the model schemes. The average size of production and sales (in terms of quantities and values) of the actual rural artisan trades in Tamil Nadu is larger than the size suggested by the model scheme only in Palmbased activities, NEO & Soap and bee keeping.

F. Sickness among rural artisan trades

Data are not available for estimating the industrial sickness/mortality among the rural artisan trades covered in the present study. Therefore, the KVIC, 'Organisational Aspects' data have been used for estimating industrial sickness/mortality in the present analysis. That is, the difference between the number of Reporting/working units and the number of units Registered/Assisted is treated as sign of industrial sickness/mortality.

The KVIC data provide annual information for the period 1961-62 to 1976-77 regarding the number of Registered/Assisted units and the number actually reporting/working. These data are presented in Table 8.

The above table indicates a fairly a high degree of incidence of sickness/mortality in most of the artisan trades covered especially in the

Table 7

Model And Actual Schemes Of Rural Artisan Trades In Tamil Nadu

S.No.	Industry	Actual/ Model	Production: Items	Production: Qty.per year	Production: Value (in Rs.)	Sales (in Rs) values only	Net earning per artisan per year
1	PCP	Model	Paddy-yearly- Rs.100 per Qtl Dal-80 Qtls a day	 4000 Qtls 2000	 400000 500000	 427000 520000	 1860.00 1496.00
				2273929 kgs.	7064941	7554391	7181.00
		Actual (166 units)		1370 per unit			
2	Oilghani	Model	Mustard Groundnut	120 Qtls 200 "	90000 148000 57179188	110850 174900 5414123	1886.00 2162.00 2791.00
		Actual (1266 units)			45087 per unit		
3	Village leather	Model	600 pairs shoes or 1200 pairs of chappals worth of	720 480	12240 9600		
					21840	21840	2781.00
			Tanned leather		30600	30600	2827.50
		Actual 1235 units)			146.31 laks	159.45lakhs	1081.00

contd....

Table 7 contd

S.No.	Industry	Actual/ Model	Production: Items	Production: Qty per year	Production: Value (in Rs.)	Sales (in Rs) values only	Net earning per artisan per year
4	Gur & Khandasari	Model	<u>Bullock driven units</u> 100 Qts. during 100 days season or one Qtl per day in a season	100Qtls	Rs.15000	Rs.15000	Rs.746
			<u>Power driven unit</u> 1000 Qts. during 100 days season	1000 Qtls	Rs.150000	Rs.150000	Rs.2600.00
		Actual (160 units)			Rs.72.34lakhs	Rs.76.07 lakhs	Rs.4474.00
5	Palmgur	Model	Palmyrah gur	1037 kgs	Rs.2074	Rs.2074	Rs.388.50
			Palmyrah palmcandy	389 kgs	Rs.3112	Rs.3112	Rs.648.00
			Palmyrah palmfibre mats	1447 kgs	Rs.2160	Rs.2160	Rs.604.80
				1440 mats @Rs.1.25 each	Rs.1500	Rs.1800	Rs.612.00
		Actual (1568 units)			Rs.1243.35 lakhs	Rs.526.38lakhs	Rs.206.00

contd....

Table 7 Contd.

S.No.	Industry	Actual/ Model	Production: Items	Production: Qty per year	Production: Value (in Rs)	Sales (in Rs) values only	Net earning per artisan per year
6	Bee keeping	Model	SchemeI-25	Honey 150Kg Wax $6\frac{1}{4}$ Kg	18000 156.25	Rs1956.25	Rs1464.75
			SchemeII-75	Honey 450Kg Wax18-75Kg	Rs5400.00 Rs468.75	Rs5868.75	Rs3944.75
		Actual 370 units		1203847Kg	-	Rs14648222	Rs352.00
7	Village Pottery	Model	Decoratives and art wares		35800.00	Rs45000.00	Rs4665.00
			caythen pipe	120000	11120.00	Rs18000.00	Rs2242.50
			pots and pans		3840.00	Rs7000.00	Rs1087.50
			Brick manufacture			Rs16500.00	Rs1816.00
		Actual (1247 units)			6206187	Rs6504123	Rs1971.00
8	Fibre	Model	Rope making	3375Kg	18562.50	Rs18562.50	Rs1317.50
			Bam making	2500 Kg	-	Rs5625.00	Rs1917.50
		Actual (1241 units)		Rs.2850233		Kg2562712	Rs2114.00

Table 7 Contd.

S.No.	Industry	Actual/ Model	Production: Item	Production: Qty per year	Production: Value (in Rs)	Sales (in Rs) values only	Net earning per artisan per year
9	Carpentry & Blacksmithy	Model	Agrl.implements bullock carts, & building mater-ials & others	-	30000	30000	3534.00
		Actual (2946 Units)	Agrl. implements & others	-	7515059	8003375	2750
10	Fruit processing & preservation	Model	Home Scale units Individual units	9.80tonnes 5 tonnes	82320 18000	82320 18000	3928.00
		Actual		7606 kgs	66194	67007	1126.00
11	Bamboo & Cane	Model	Expected annual production		4500.00	7500.00	875
		Actual			1898247.00	2089418	2858.00
12	Non-edible	Model	Laundry soap(per Kg Rs5/-)	12 tonnes	60000.00	72000	5646.00
			Toilet soap	22.5 tonnes	-	326250	4896.00 8100.00 2500.00
		Actual(32 units)		1009775kgs	4723529	5495061	27198.00

contd.....

Table 7 Contd.

S.No.	Industry	Actual/ Model	Production: Items	Production: Qty per year	Production: Value (in Rs)	Sales (in Rs) values only	Net earning per artisan per year
13	Lime manufacturing	Model	Quick lime	200 tonnes	30000.00	40000	2658.00
			Chalk making	"	36000.00	28000	2896.00
			Conch shell products	"	35000.00	35000	1556.00
			Agarbathi stand table lamps, candle holder, paper weights, etc.		22000.00	22000	1984.00
		Actual (312 units)	slacked & inslacked lime fancy shell articles and lime mortar	17505 tonnes	2367491	2442451	3004.00

Source: KVIC Model Schemes values are used for "Model"
KVIB data for 1978-79 based for "Actual"

Table 8

Organisational Aspects

S.No.	Rural Artisan Trade	1961-62		1962-63		1963-64		1964-65	
		A	R/W	A	R/W	A	R/W	A	R/W
1	PCP	2051	1166	2228	1379	2479	1055	1677	980
2	Oilghani	18756	18756	19858	19858	20807	20807	21446	21446
3	Village leather	1659	480	1797	520	520	520	626	626
4	Cotton match	21	21	24	23	65	32	77	43
5	Gur & Khandasari	671	671	802	802	2568	2568	1930	1930
6	Palmbased	3239	3239	3307	3307	3226	3226	3477	4377
7	Soap	607	319	629	317	663	324	685	316
8	Handmade paper	247	120	265	120	147	147	152	152
9	Bee keeping	1156	1156	1266	1266	1279	1279	1429	1429
10	Pottery	738	738	857	857	979	979	1046	1046
11	Fibre	524	524	664	664	768	768	866	866
12	Carpentry & blacksmithy	--	--	127	127	270	270	300	76
13	Lime	NA	NA	NA	NA	77	53	135	64
14	Cane & Bamboo	--	--	--	--	--	--	--	--

Source:

Note: A: Assisted
R/W: Reported/working

contd.

Table 8 Contd.

S.No.	Rural Artisan	1965-66 A	1965-66 R/W	1966-67 A	1966-67 R/W	1967-68 A	1967-68 R/W	1968-69 A	1968-69 R/W
1	PCP	1774	1042	1848	909	1853	1025	1890	961
2	Oilghani	22070	21524	21866	21866	21930	21866	22042	19646
3	Village leather	662	662	698	698	708	708	832	832
4	Cottage match	110	50	149	61	173	69	212	85
5	Gur & Khandasari	2113	2113	742	742	1026	1026	1229	1229
6	Palmbased	3511	3511	3507	3507	3303	3303	3469	3469
7	Soap	717	305	742	314	1079	407	1130	454
8	Handmade paper	276	149	287	147	308	168	308	168
9	Bee keeping	1263	1263	1274	1274	137	137	168	168
10	Pottery	1092	1092	1138	720	1139	846	1999	1140
11	Fibre	988	988	1115	1115	1223	1223	1400	1400
12	Carpentry & Blacksmithy	347	342	342	200	283	270	340	289
13	Lime	201	92	249	162	289	126	345	132
14	Cane & Bamboo	-c-	-	-	-	-	-	-	-

contd.....

Table 8 Contd.

S.No.	Rural artisan trade	1969-70		1970-71		1971-72		1972-73	
		A	R/W	A	R/W	A	R/W	A	R/W
1	PCP	1902	778	2986	754	3142	775	3216	765
2	Oilghanti	22192	18089	22239	20332	22378	17985	23125	17072
3	Village leather	909	909	909	935	1044	1044	1076	1076
4	Cottage match	257	102	102	325	342	125	756	135
5	Gur & Khandasari	1343	1343	1058	1058	566	566	473	473
6	Palmbased	3396	3396	3528	3528	3397	3397	1855	1247
7	Soap	1165	404	1197	408	1228	353	1282	389
8	Handmade paper	311	172	314	176	316	176	316	179
9	Bee keeping	141	141	103	103	593	593	582	582
10	Pottery	2461	1423	2957	1180	2641	2329	4026	2588
11	Fibre	1497	1497	991	991	1030	1030	1566	1071
12	Carpentry & blacksmithy	437	326	572	429	572	532	670	581
13	Lime	394	394	428	149	393	162	461	461
14	Cane & Bamboo	-	-	-	-	-	-	-	-

contd.....

Table 8 Contd.

S.No.	Rural Artisan Trade	1973-74 A	1973-74 R/W	1974-75 A	1974-75 R/W	1975-76 A	1975-76 R/W	1976-77 A	1976-77 R/W
1	PCP	3276	765	3276	756	3267	758	4498	1680
2	Oilghani	24695	15453	25949	14698	26451	15161	28364	14085
3	Village leather	1069	1069	1039	1039	19418	19418	18138	18138
4	Cottage match	271	135	315	141	353	151	393	160
5	Gur & Khan-dasari	915	291	884	649	942	524	700	614
6	Palmbased	2433	1429	2571	1461	2604	1542	2631	1416
7	Soap	1249	409	1360	400	1430	467	1609	551
8	Handmade paper	319	479	329	184	322	188	329	201
9	Bee keeping	582	582	503	503	431	431	395	395
10	Pottery	4439	2535	4726	2823	11742	9382	10208	8493
11	Fibre	1071	1071	1121	1121	1190	1190	1214	1214
12	Carpentry & Blacksmithy	632	521	736	567	763	588	796	621
13	Lime	477	163	687	172	974	275	1435	662
14	Cane & Bamboo	-	-	-	-	-	-	-	-

Source:

Note: A: Assisted

R/W: Reported/Working

more recent years. Bee keeping and fibre units alone do not show any signs of sickness throughout. The total number of units registered recorded a significant increase from 29669 in 1961-62 to 70710 in 1976-77. So also the increase in total number of units reporting/working was from 27190 to 48270. The proportion of reporting/working to registered units declined over the period from 0.9 to 0.7. Among the artisan trades reporting sickness/mortality, PCP, cottage match, handmade paper, pottery carpentry and blacksmithy and lime processing are prominent throughout the period. Gur & Khandasari and palmbased activities seen to be affected only in the more recent years i.e. 1972-73.

III. Institutional Agencies and linkages

Tamil Nadu enjoys a well organised institutional infrastructure for rural artisan development. Several official and voluntary agencies have been functioning even in remote backward areas providing the rural artisans with various kinds of socio-economic services. A sample list of selected institutional agencies is given in Table 9. It must be borne in mind that all these agencies function in the rural areas in addition to the All India Institutional Agencies such as RAP, KVIC, the All India Handicrafts Board and the SISI. At the district level the DIC has come in as a new institutional agency. Thus it may be seen that Tamil Nadu is well placed with a large number of well organised institutional agencies. However from the working of these institutional agencies so far it may be said in general that there has been no effective implementation or follow up measures. For instance the progress Report on Rural Artisans Programme for 1975-76 pointed out that in Tamil Nadu the programme was not implemented in any of the projects and that effective follow-up and monitoring measures were found to be wanting mainly due to the lack of suitable personnel to run the various schemes and due to the frequent transfers of the project personnel.

Lack of institutional coordination is another major problem facing these institutional agencies. Avoidable duplication of effects and unhealthy competition are seen in the case of Khadi Commission and the Khadi

Table 9

Selected Voluntary Agencies Of Rural Artisan Development In Tamil Nadu

A. Social Aspects

Health & Family Welfare	Education	Harijan Welfare
Gandhigram Trust	Gandhigram Trust	Gandhigram Trust
Gandhi Ashram Tiruchengodu	Gandhi Ashram Tiruchengodu	Gandhi Ashram Tiruchengodu
Kanyakumari Mission	Gandhiniketan, Kallupatti	Gandhiniketan Ashram Kallupatti
	Kanyakumari Mission	
	YMCA, Martandam	

B. Economic Aspects

Research and Development	Training	Extension	Production
Gandhigram Trust	Gandhigram Trust	Gandhigram Trust	Gandhigram Trust
A.M.M. Murugappa Chettiar Research Centre, Madras	Gandhiniketan Ashram, Kallupatti	Gandhiniketan Ashram, Kallupatti	Gandhiniketan Ashram, Kallupatti
	YMCA, Martandam	YMCA Martandam	Gandhi Ashram Tiruchengodu
			YMCA, Martandam
			Kanyakumari Mission
			Tamil Nadu Sarvodaya Sangh, Tiruppur

Source: E S Srinivasan & A K Rajula Devi, Khadi Gramodyog, September 1979

Board on the one hand and the All India Handicrafts Board, Tamil Nadu, and Poompuhar on the other. The suspense that surrounds the continued existence of the DIC's has made them ineffective as coordinators at the district level. The need therefore arises for an apex institution which can coordinate the various institutional functions at the block district level as well as at the state level.

Research and Information system

Specialised research institutions such as the CLRI and the AMM Murugappa Chettiyar Research Centre, Madras, have been contributing significantly to technological inventions and innovations appropriate for the rural artisans of Tamil Nadu in their respective areas. To add to these, the Research Departments of several institutional agencies such as the Gandhigram Rural Institute have been conducting continuous research in rural industrial activities such as Oilghani. ~~For the Palmbased activities such as oilghani~~ For the palmbased activities the Tamil Nadu State Palmgur and Fibre marketing cooperative federation through its project at Madhavaram has already introduced several inventions and innovations. The 'Poompuhar' has its own design centres for the various handicrafts of Tamil Nadu.

The past experience of these research institutions, however, suggest that the success of such an innovation information system depends atleast intially on the emphasis that is given to the 'know-why' aspects and rapid difusion of the research information. The absence of an institution such as Planning Action Research Institute-Lucknow for the verification and application of the research findings at the state level is worth noting here. Such an institution can greatly reduce the distance between the producers and the users of research and development at the state level.

The information gap that prevails among the rural artisans in Tamil Nadu requires a systematic collection and dissemination of information regarding existing R & D at the state level.

Training and Extension

Training and extension services assume special importance for the

rural artisans in Tamil Nadu atleast for the following three reasons:

(a) the enormous scope for introducing new technologies as suggested by the KVIC Commission

(b) the non availability of repair and maintenance facilities and

(c) the low level of technical awareness and absorbtion of the rural artisans.

Although all the 15 rural industries covered in the present study do require training and extension facilities for the above reasons, the need is greatly felt especially by oilghani, pottery and palmbased activities. It must be pointed out here that the response of the rural artisans to such training/extension schemes offered by the Rural Artisan Programme (RAP), KVI Commission Board is reported to be good with the negligible percentage of dropouts. More recently the Small Industries Service Institute (SISI) has started the motivation campaigns for the promotion of small scale and village industries especially in backward areas. Since the setting up of the DIC's in Tamil Nadu in 1978, the SISI, Madras, has organised three such campaigns in Kanyakumari, Ramanathapuram and Periyar districts. The main objective of such campaigns are "to identify local entrepreneurial talents to educate them about the industrial opportunities open and to make available to them package of assistance by bringing all the agencies connected with the development of cottage and small small scale industries at one place". These campaigns are reported to be "a spectacular success" measured by the response they have elicited. For instance, in the case of the latest SISI campaign at Periyar district, 109 Khadi and Village units and 28 handicrafts units were provisionally registered during the campaign itself.

From the evaluation of the performance of the various institutional agencies providing training facilities for the rural artisans it may be said that the success of such programmes depends on the follow-up action taken by the local agencies and on the provision of such facilities on a continuing basis with scope for feed back from the field.

B. Official agencies

The rural artisan programme

The Rural Artisan Programme (RAP) was initiated in the year 1971 with a view to provide training facilities to the rural artisans to enable them to use improved tools. Until 1973 the RAP wastreated as a part of the SFDA and MFAL. In 1974 the RAP was merged with the Rural Industries Projects wherever both the programmes were in operation.

In Tamil Nadu, until 1977 only in two districts - Salem and Tirunelveli - the RAP was operated through the RIP, During 1977-78, Dharmapuri district was added to this list. With the establishment of the DIC's in all the districts of Tamil Nadu, the rural artisan development has become a part of the DIC programme. The evaluation of the work done by the RAP (until 1977) show that there was no coordination between the training institutions such as the ITI's and the project staff. The evaluation reports also indicate that the success of the Programme depended mainly upon the implementing officers at thegrass root level.

The Khadi and Village Industries Commission/Board

As a non profit making institution the KVI Commission/Board has been contributing significantly to the development of rural artisan trades in Tamil Nadu.

Recognising the need for integrating the activities of several subsidiary organisations of the KVIC Board and the non-official voluntary agencies, the Sixth Year Plan (1978-79 to 1983-84) of the KVI Commission suggested that policy formulation, planning, regulation of finance and directions for implementation of the programmes would be in the hands of the KVI Board at the State level, and the implementation at the grass-root level should be vested in voluntary agencies at the village/block level. This implies perfect coordination among the institutional agencies, which is still elusive.

All India/State Handicrafts Boards

Since its establishment in 1952, the All-India Handicrafts Board, through its regional Design Centres and Trade Fairs, has been participating effectively in the developmental activities of the rural artisan trades at the state level. The State Handicrafts Development Corporation ("Poompuhar") significantly adds to these contributions through its design and marketing agencies. For instance, during the year 1977, the Poompuhar was running as many as 20 production units and 15 sales emporia in Tamil Nadu and through these produced more than Rs.20 lakhs worth of products and exported goods worth Rs.6 lakhs. Among the goods produced by the Poompuhar, bell metal articles occupy and important place (more than 60 per cent) and handlooms account for more than 80 per cent of the exports.

The Central Leather Research Institute, Madras

Established in 1953 as one of the national laboratories under the CSIR, the CLRI, Madras has been engaged in fundamental research in several fields connected with leather and allied industries. Also, the Institute has been engaging itself in applied research which yields products and processes for commercial exploitation. Periodical courses are offered by the Institute in finished leather manufacture maintenance and repairs of machinery, maintenance of quality control and standardisation of products and processes. Free demonstrations in the premises of the tanners, consultancy services through feasibility reports and techno-economic surveys are a few of these important functions. Special publications and bulletins on leather industry and trade are brought out periodically. Historically, the Institute has been connected with large and medium scale units and their concern for tiny village leather units is of recent origin.

C. Cooperative Societies

The latest available particulars regarding registered

cooperative societies are given in Table 10. According to this there were 2915 cooperatives societies in Tamil Nadu of whom only 1273 societies were actually working on 1.4.1979. The rest were either lying dormant or were already liquidated. Among the 1273 working cooperative societies palmabsd activities claimed the largest number of societies (viz.1026) and accounted for more than 81 per cent of the working cooperation societies. Also, it should be noted that of the 1598 cooperative societies in palmbased activities about 65 to 79 per cent were working in the year 1979, thus suggesting a relatively low sickness/mortality ratio in palmbased among the rural aftisan trades. Among the (623) cooperative societies lying dormant in the year 1979-81 per cent (504) units belonged to palm-based trades whereas in the 'liquidated' category palmbased activities show an insignificant figure of 5 per cent. Put together this suggests that with timely measures it is possible to activate the dormant palm-based units also thus covering almost 95 per cent of the number of palm-based units in Tamil Nadu.

It is interesting to note here that a large number of oil units (about 44 per c ent of the total units) have been reported as liquidated despite of the fact that oilghani trades in Tamil Nadu could stand out on top in terms of production and sales values. It will be worthwhile there-fore to find out the reasons for their liquidation.

The KVI Commission data on Cooperative Societies for the period from 1961-62 to 1976-77 show that cooperative societies have been formed only in the more recent years in NEO & Soap and the societies have been on the increase in the 70's. In pottery, lime manufacturing, carpentry & blacksmithy, beekeeping, handmade paper whereas in palmbased, leather, oil-ghani, PCP and cane and bamboo the number has been relatively stagnant.

Working Cooperatives

On the basis of the number of cooperative societies we can classify the rural artisan trades into 3 sub groups. (1) the rural artisan

Table 10

Registered cooperative societies - (working, dormant and liquidated) in Tamil Nadu as on 1st April 1979

S.No.	Name of the Industry	No of societies Working	Dormant	Liquidated	Grand total
1.	Oil	40	13	115	168
2.	Pottery	53	13	69	135
3.	Brick	12	29	69	110
4.	Fruit processing	1	1	-	2
5.	Beekeeping	18	5	3	21
6.	Gur & Khandasari	3	2	9	14
7.	Handmade paper	5	-	4	9
8.	Cane & bamboo	18	2	19	39
9.	Leathers	6	11	22	39
10.	Multipurpose	6	2	-	8
11.	Carpentry & blacksmithy	25	9	28	62
12.	Hardbounding	22	27	75	124
13.	Lime	7	6	41	54
14.	Fibre	11	2	10	23
15.	Palmgur	1022	504	51	577
16.	Khadi	-	-	3	3
17.	Farm service	-	3	135	38
18.	Oil products	-	-	321	321
19.	Mat	18	1	11	30
20.	Palm leaf	4	2	15	21
21.	Carpet, drugget & cumbly	2	-	1	3
22.	Soap workers	-	-	1	1
23.	Parchedgram	-	-	1	1
24.	Small match	-	1	-	1
25.	Agricultural implements	-	-	1	1
	Total	1273	623	1000	2915

Source: KVI Board, Tamil Nadu, Annual Report, 1978-79

trades whose percentage of working cooperative societies lie above 60 per cent (2) the rural artisan trades whose percentage of working cooperative societies lie between 30 per cent to 60 per cent and (3) the rural artisan trades whose percentage lie below 30 per cent.

In the first group come beekeeping (74 per cent), palmgur (65 per cent) and mat weaving (60 per cent). The second sub group comprises handmade paper (55 per cent), fruit processing (50 per cent), fibre (48 per cent), cane and bamboo (46 per cent), carpentry and blacksmithy (40 per cent) and pottery (39 per cent). All the other rural artisan trades form the third group.

The Palmgur Cooperative societies (80 per cent) constitute the major proportion followed by pottery (41 per cent) and oil (31 per cent) of the total number of working societies. All the other societies form an insignificant proportion.

Liquidation of cooperatives

The societies liquidated can also be classified into 3 sub groups,, viz.

(1) Societies whose percentage of liquidation lies above 60 per cent

(2) Societies whose percentage lies between 31 per cent - 60 per cent and

(3) whose percentage lies below 30 per cent.

The first group consists of lime (76 per cent), palmgur (71 per cent), oil (69 per cent), brick (63 per cent), gur & khandasari (64 per cent) and hand pounding (60 per cent). The second group cosnsists of leather (55 per cent), pottery (51 per cent), hand made paper (45 per cent), carpentry and blacksmithy (45 per cent).(43 per cent), fibre and mat weaving (37 per cent), Rest of the societies form the third group.

Taking the total liquidated societies as 100, greater proportions are covered by oil products, pottery, brick and handmade pounding. Others form a negligible proportion.

Women's organisation

Except in the case of Shri Mahila Graha Udyog Lijjat Papad, the rural women artisans do not have any institutional agency of their own for production/distribution activities. Even in the case of the Lijjat Papad organisation, it is seen that it is a wing of the KVI Commission in Tamil Nadu governed by the rules and regulations and marketing agencies proposed by the KVI commission. Also it is of recent origin as it was started only in June 1978 with 60-70 members. The average monthly production at present (1980) is 40,000 packets.

E. Voluntary organisations

Tamil Nadu is well equipped with several voluntary agencies too which are involved in the development of rural artisan trades. A sample list of these voluntary agencies and the nature of their contribution is given in Table 9.

F. Linkages

It will be interesting to study the type of linkages between the rural artisans and the rest of the economic activities in rural areas of the Tamil Nadu economy.

A priori it may be said that various kinds of economic, technological and financial linkages are possible between the rural artisans and others. However, since suitable data are not available the linkages are studied in this paper as indicated by the production/sales (items) of the rural artisan trades in Tamil Nadu. With the help of this indicator it may be said that all the resource-based trades such as cane and bamboo, lime, fruit processing, pottery (excluding glazed pottery), ghani oil, gur and khandasari, bee keeping and PCP, since these trades happen to be agro-based or forest resource based and since these trades produce either perishables which cannot withstand long journeys and items of immediate consumption, per forcem establish a two way contact - for collection of inputs and for distribution of outputs - with the other sectors within the district/state.

Rural artisan trades such as fibre, palmbased, although local resource-based, produce items for consumption mostly outside the district/state. These obviously are the rural artisan trades which stand out prominently in terms of production/sales (including exports). The service oriented trades-carpentry & blacksmithy and village leather - produce and sell goods mostly for local consumption such as agricultural implements and locally demanded foot wear respectively.

To sum up, although most of the rural artisan trades in Tamil Nadu suffer from lack of research & development facilities, extension & training facilities and marketing and financial arrangements, it is possible to specify for each of the rural artisan trades a major problem which requires the immediate attention of the official and voluntary agencies. Table 11 indicates such prpblems and possible remedies for a sample list of rural artisan trades.

IV Conclusions:

Tamil Nadu is one of the few states in India which contribute significantly through the rural artisan trades. In terms of the share of Tamil Nadu in All India production of rural industries, palmbased, cottage match, NEO & Soap and beekeeping activities stand out prominently. Within Tamil Nadu also in terms of employment production and sales, palmbased and bee keeping activities are prominent.

It is difficult to identify homogeneous groups of rural artisan trades on the basis of their economic functions with the available data at present. The fifteen rural artisan trades covered in the present study, however, fall under three broad groups:

1. Mass production sector (e.g. NEO & Soap, cottage match, PCP, gur & khandasari, handmade paper, oil ghani, pottery, fruit processing, lime manufacturing and bee keeping).
2. Artistic handicrafts sector (e.g. cane & bamboo and palmleaf/fibre)

3. Service sector (e.g. carpentry & blacksmithy and village leather).

The problems of each of these sectors are distinct and therefore, require separate treatment.

The rural artisan activities covered in the present study together contribute Rs.20-25 crores worth of goods annually and employ more than three lakhs of rural artisans through the KVI Board alone in Tamil Nadu.

All the rural artisan trades except oil ghani and NEO & Soap recorded very low annual production per artisan suggesting thereby either low productive capacity or disguised unemployment conditions in most of these trades. The prevailing wages in these trades are low. All these factors account for the poverty of the rural artisans in Tamil Nadu.

The low per capita income explains the dependence of the rural artisans on external sources of funds which force them to sell their product in settlement of their loans. The production - marketing - financial activities of the rural artisans in Tamil Nadu, thus, seem to be highly inter-linked.

The available technological information is rather meagre for the rural artisan trades in Tamil Nadu. However, the present study indicates that there is plenty of scope for introducing technological improvements in the rural artisan trades such as palmbased activities, fibre, cane and bamboo, pottery, oil ghani and village leather. The much needed industry-wise indepth techno economic studies regarding appropriate technologies are lacking in Tamil Nadu.

Several basic issues concerning rural artisan development in Tamil Nadu still remain unsolved mainly because of the absence of reliable information. A sample list of such issues is given below:

1. The identification of the patterns of ownership and operation among the rural artisan trades.

2. The identification of appropriate (intermediate) technology suited for each of the rural artisan trades.

Table 11

Major problems of rural artisan trades in Tamil Nadu

Rural artisan trades	Problems	Remedies
1. Palmbased & handicrafts beekeeping	Lack of:Research& Development	Invention/Innovation and Information Dis-semination system
2. Carpentry & blacksmithy pottery, oil ghani	Extension/training	Extension/training/ technical consultancy services
3. Village leather, Fibre, matchmaking	Marketing & Finance	Integrated marketing and financial facilities

3. The integration and coordination measures needed at the State/District levels among the official and voluntary institutional agencies involved in rural artisan development.

4. The specification of regional (district/block level) characteristics and functional (cost/size etc.) characteristics for each of the rural artisan trades.

The above unsolved issues clearly point to the need for specific indepth studies both trade-wise and region-wise in Tamil Nadu.

ACKNOWLEDGEMENT

In the preparation of this study several organisations, and experts connected with various rural artisan trades helped the study team with necessary data and information. Special mention must be made here of the help and encouragement received from Mr T. V. Kasturi Rangan (SISI), Mr. Kumaraswamy (KVIC), Mr. Chandrasekaran (KVIB) and Mr. Jayaseelan (RBI).

Also in the preparation of this study, several reports and publications on the rural artisan sector of Tamil Nadu have been made use of. Of these, the following need a special mention here:

1. Recommendations of the Expert Study Group on Home & Rural Industries Nayudamma Committee Report - Feb. 1979.
2. Model Schemes for Individuals of Village Industries (KVIC, Bombay, 1976).
3. KVIC Activities at a Glance, (KVIC, Bombay, November 1979)
4. Reserve Bank of India, All India Debt, and Investment Survey, 1971-72.
5. SISI Reports.

Annexure

Note on the data sources

There are four major institutional sources providing statelevel information about the rural artisan trades in Tamil Nadu, as mentioned in Chapter I above. In the present note, the nature of data available from each of these sources and their deficiencies are briefly indicated.

I. Khadi & lage Industries Commission/Board:

Being a prominent sponsoring institution, the Khadi & Village Industries Commission/Board (Tamil Nadu) provides the most authoritative and useful basic information about the village industries coming within their purview.

Their coverage of village industrial activities (as shown in Table 1 above) is fairly exhaustive. Pertaining to each of these activities the Khadi Commission/Board (Tamil Nadu) provides the following information: The number of units assisted, production (items, quantity and value), sales (items, quantity and value), employment (full time or part time, number of persons engaged), exports (wherever applicable) details, performance of the assisted units in backward areas, implements distributed (for selected activities), disbursement of Khadi Commission/Board Grants/loans, number of cooperative societies etc. Since these data are given in the All India Khadi Commission format, the state level data are easily comparable with their corresponding All India data.

However, a major problem with this data-source is that it does not provide any information by unit or by village. At the State level mostly aggregate figures are available for the activities covered. District-wise information, although available for some prominent village industrial activities such as palm-based, is incomplete. There are other problems too:

a) Details regarding the structure of wages and employment, activity-wise, are either inadequate (as in the case of palmgur, NEO & Soap etc.) or not available at all (as in the case of fruit processing, lime processing or cereals and pulses and bee keeping).

b) The migratory characteristics of rural artisans and information regarding the employment of family/hired labour, terms and conditions governing full time/part time employment, are not available either from the Khadi Commission or from the Khadi Board.

c) Time series data especially of production, sales, employment etc. are not available activity-wise and per unit.

d) Information regarding different technology (model) schemes is available for each village industry covered by the Khadi&Village Industries Commission on an all India basis. Similar data are not available for Tamil Nadu. Also, information regarding the awareness of the artisans of the existence of different levels of technology and the problems of implementation of improved technology is lacking.

Also, a peculiar problem arises because of the lack of specificity of the data released by the Khadi Commission and Khadi Board. For instance, the units assisted by the Khadi Commission include the units sponsored by voluntary agencies such as Sarvodaya Sangh and some of the Khadi Board units which get financial support from the Khadi Commission. The details regarding such units are not available and consolidation becomes difficult. As a result of this, inaccuracies occur in the estimation of production, sales and employment figures.

II. Directorate of Census Operations

The widest coverage of rural artisan categories (as shown in Table I above) is available from the Directorate of Census Operations. The coverage, however, includes even the highly sophisticated categories such as electronic workers. The number of artisans in each of these categories and their regional distribution (district-wise) are available from the Census Organisation. However, non availability of comparable data over time, conceptual and coverage differences and absence of economic information are some of the problems faced by the analyst.

III. All India Handicrafts Board

For the Handicrafts sector in Tamil Nadu, district level

information is available from the All India Handicrafts Board (TN) and from the 'Poompuhar'. They provide, through their Annual Reports and design centres, information regarding the number of artisans in each category, items produced and sold, annually (including exports) in quantity and value terms, and technical information such as designs. However, the information regarding marketing practices and channels is not available for each of the handicrafts. Also, overlapping of functions in the case of village industries such as palmbased activites among the Khadi Commission/Board (Tamil Nadu) and the All India Handicrafts Board (Tamil Nadu) is also noticed.

IV. Reserve Bank of India

The Reserve Bank of India All India Debt & Investment Survey 1971-72 provides useful information regarding the assets and liabilities of rural artisan households according to the asset groups. The present study relied upon this source of data for estimating the indebtedness (as an indicator of poverty) of the rural artisans. However, such data are available as on 30th June 1971. As a result of this, incorporation of such financial information into the regular analysis becomes difficult.

That these different data-sources pose coverage and conceptual problems to the analyst can be seen from Table AI.

Apart from these four data sources, there are other sources of information for the rural artisan sector of Tamil Nadu. Among these mention must be made of the Nayudamma Committee Report (1979) and periodical reports of the Small Industries Service Institute, Madras. The former is an official attempt to assess the role of home and rural industries of Tamil Nadu in providing employment opportunities for the rural unemployed. The latter offers district level information regarding rural industrial potentialities, training facilities offered by the SISI to the rural artisans and their impact on the rural entrepreneurs. Such information however, is available only for the new districts (such as Periyar) and the backward districts (such as Ramanathapuram).

From the above, it may be clearly seen that there is a dire need for the collection of primary data at the village level for each

rural artisan activity in Tamil Nadu. To begin with, a comprehensive village level sample survey is selected rural-artisan-concentrated areas may be attempted.

Table AI

Rural Artisans in Tamil Nadu - Source-wise

S.No.	Districts	1971 Census Male	Female	Total	1977 Handi-crafts	1977-78 KVIC Total
1.	Chengalpattu	76186	8131	84317		21433
2.	South Arcot	51829	3544	55373		3734
3.	North Arcot	92603	10383	102986		15213
4.	Coimbatore	149351	36171	185522	)	55288
					55)	
5.	Nilgiris	6648	1267	7915	)	
6.	Thanjavur	62424	6352	68776		6983
7.	Tiruchirapalli	97862	14156	112018	133	5071
8.	Madurai	51828	9279	61107	188	9541
9.	Ramanathapuram	55660	22395	78055	78	29981
10.	Salem	111737	20435	132172	)	9229
					15)	
11.	Dharmapuri	20901	3047	23948	)	2998
12.	Tirunelveli	71661	50842	122503	590	27023
13.	Kanyakumari	33867	11219	45086	2024	8402
14.	Pudukottai	--	--	--	38	2169
15.	Madras	--	--	--		162
		902557	197221	1099778	95000*	197223

*This refers to State (Tamil Nadu) Total for which full break-up details are not available